REMARKS

The last Office Action has been carefully considered.

It is noted that claims 1-7 are rejected under 35 U.S.C. 102 (e) over the patent to Yoshida.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) over the patent to Yoshida in view of the patent to Toyama.

Claim 10 is considered as allowable by the rejection under 35 U.S.C. 112.

The Examiner's indication of the allowability of claim 10 has been gratefully acknowledged. Claim 10 has been amended in compliance with the Examiner's grounds for the rejection of this claim under 35 U.S.C. 112, and it is believed that this claim is now in allowable condition.

After carefully considering the Examiner's grounds for the rejection of the claims, applicants have canceled claims 2, 3, 4, 5, 8 and 9 and amended claim 1, the broadest claim on file, by introducing into it the

features of claim 2, 3, 4, 5, and 8. It is respectfully submitted that the new features of the present invention which are now defined in amended claim 1 are not disclosed in the references applied by the Examiner and can not be derived from them as a matter of obviousness.

Applicants have also submitted another independent claim 12 which substantially corresponds to claim 11 but additionally includes the features of original claim 9. It is believed that claim 11 also defines the combination of the features which are not disclosed in the references and can not be derived from it as a matter of obviousness.

It is respectfully submitted that claims 1 and 11 recite such combination of features which define the present invention with the inventive interjunction and interaction of the corresponding features, and therefore claims 1 and 11 should be considered as patentably distinguishing over the art and should be allowed.

Applicants have also submitted claim 12 which substantially corresponds to original claim 1 but additionally defines that the optical axis 24 of the coupling element 26 extends perpendicular to the sensor 16. In accordance with the present invention this is obtained with the use of the

retaining device 24 which is formed as a plane-parallel plate with optical surface quality satisfying high requirements. An angular error of the coupling element 26 to the optical axis leads to a not acceptable error signal on the sensor 16.

The coupling element 26 is not as simple, single-axis optical lens, but instead is a multi-axes optical coupling element with which a plurality of optical beams with high parallelism and phase frequency are produced and focused to the optical sensor.

The coupling element 26 produces a plurality of beams which are all vertical and must fall on the sensor without optical path differences. These beams which can be identified by the type of the beam source as gaussian beams fall directly on the surface of the sensor. By means of the retaining device 24 with the precision in the surface, the connection process can be used with a very low connection gap less than 5 m μ. The used connection process guarantees after the adjustment a minimal error orientation in the vertical optical axes of all optical beams.

In accordance with the present invention with the inventive evaluation of different signals of the sensor by the occurrence of the optical

beams, a horizontal orientation and an angular orientation in a horizontal plane is possible. This evaluation is suitable also for optical beams with a very small spot diameter less than 100 µm on the sensor with a very small sensor with correspondingly a very sensor less than 100 µm.

It is therefore believed that claim 12 should also be considered as patentably distinguishing over the art and should also be allowed.

Reconsideration and allowance of present application is most respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place this case in condition for final allowance, then it is respectfully requested that such amendments or corrections be carried out by Examiner's Amendment, and the case be passed to issue. Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, he is invited to telephone the undersigned (at 631-549-4700).

Respectfully submitted,

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